

## Field Operations: Botanical Surveys

### Coronado National Forest Chili Pepper Count

#### Overview

Wild chili peppers, known regionally as Chiltipenes (or to botanists as *Capsicum annuum* var. *glabriusculum*), have been a part of the North American diet for 8,000 years. The small red peppers are about as spicy as jalapenos. They are the predecessor to most varieties of peppers we eat today—from the sweet green bell to the fiery serrano.

While uncommon, this sensitive species thrives in the Tumacacori Mountains' Wild Chili Botanical Area. A traditional harvesting area for local tribes, "Tumacacori" means "place where the little red pepper is found in abundance" in the Tohono language.

In recognition of this cultural resource, the Coronado National Forest established a botanical area in the 1990s in collaboration with local ethnobotanist, author, and co-founder of Native Seeds/SEARCH Gary Nabhan.

#### Project Summary

The botanical area had not been visited since 2006. Last fall, Enterprise Program botanist Zya Levy and biological technician Erica Lee created a survey design, laced up their snake gaiters, and led a crew of volunteers, national forest staff, and Borderlands Restoration employees into the desert. The crew searched for wild chilis and other wild crop relatives, such as cotton, tepary beans, and amaranth.

#### Next Steps

The Coronado National Forest will use the survey data to conserve the species and work toward designating the area as a genetic resource reserve. Partner organization Borderlands Restoration will use the survey maps for future seed collection, and someday parent seeds from the Wild Chili Botanical Area could be used to genetically enhance modern crops to be more drought, insect, heat and disease tolerant. In total, 453 individual chili plants were found and mapped.



The rugged Tumacacori Mountains, home of wild chili plants. (Photo credit: U.S. Forest Service)



Planning Group Supervisor Rachel Hohl and Coronado National Forest Natural Resource Staff Officer Chris Thiel head into the rugged Tumacacori Mountains to look for wild chili peppers. (Photo credit: U.S. Forest Service)

#### For More Information

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